

## Catalysts for enactment of PDUFA

- 1962 - Amendments to FD&C Act
  - Origin of modern drug development process
  - Requirement that drugs be shown to be safe and effective prior to approval
- 1970's - Emergence of "Drug Lag"
  - Drugs approved in Europe years ahead of U.S.
- 1980's - Emphasis on Patient Access
  - AIDS, cancer, etc.
- 1992 - Prescription Drug User Fee Act
  - Attempt to address chronic under funding of FDA new drug review program



# History of PDUFA

- PDUFA 1: FY93-FY97
  - Primary focus - decreased review times
  
- ◆ PDUFA 2: FY98-FY02
  - Re-authorized in 1997 as part of FDAMA
  - Primary focus - decreased review times and shortened development times
  
- ◆ PDUFA 3: FY03-FY07
  - Re-authorized in 6/2002 as part of Bioterrorism Preparedness and Response Act
  - Sound Financial Footing
  - Expand interaction & communication in IND phase and during 1<sup>st</sup> cycle review
  - Include post-market safety for 2-3 yrs post-approval

## Similar user fees exist within the EMEA

- Current application free for single strength and one pharmaceutical form is €232,000 with an additional €23,200 for each additional strength and/or form
- Annual fee of €75,600 is assessed with a five year renewal fee of €11,600.
- EMEA goal of 75% funding from industry fees and 25% from European Commission
- In comparison ...
  - UK's Medicines and Healthcare products Regulatory Agency is funded entirely through user fees

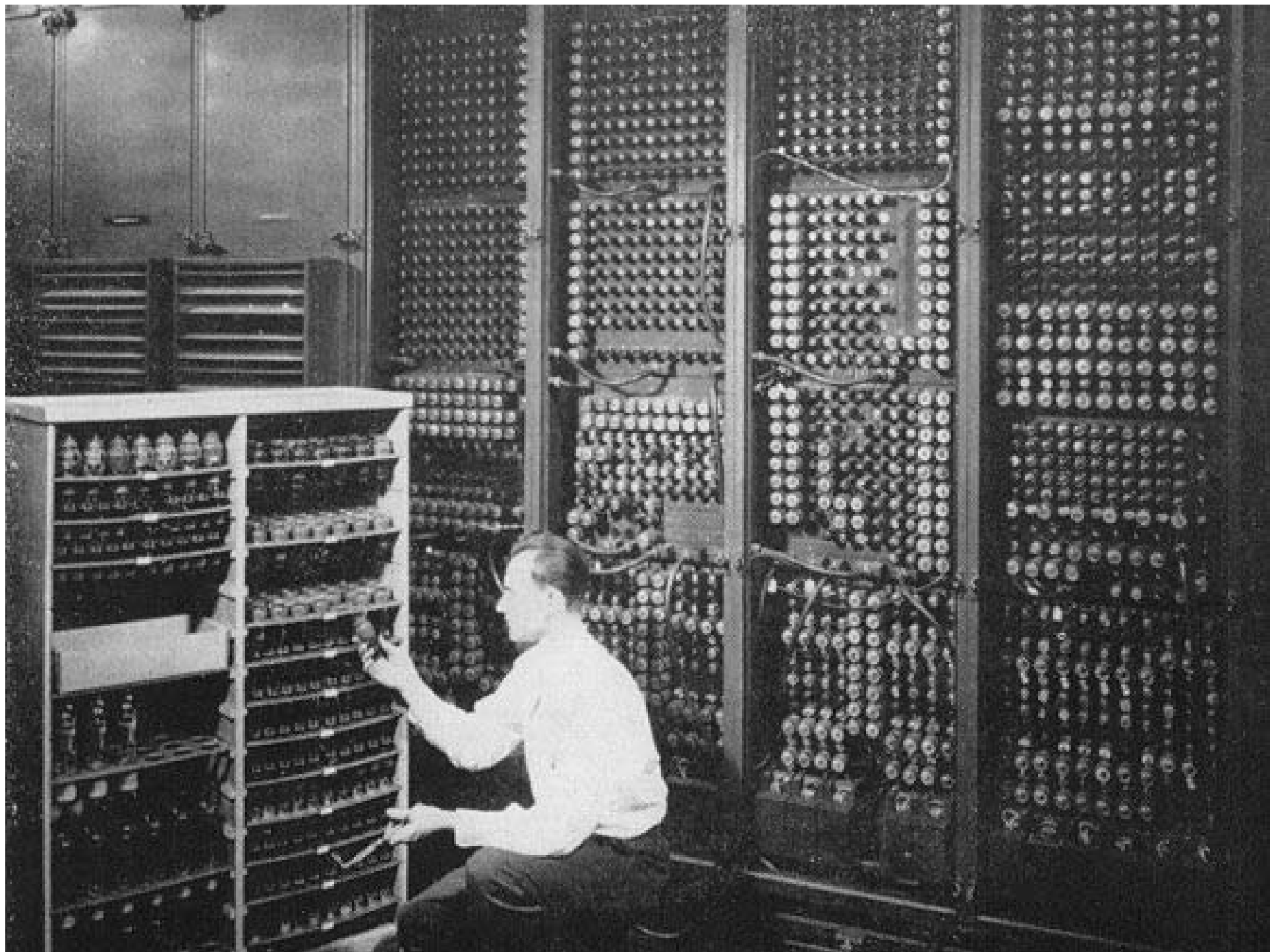
Sources: Ines M. Vilas-Boas, C. Patrick Tharp, "The Drug Approval Process in the U.S., Europe, and Japan: Some Marketing and Cost Implications", J. Managed Care Pharm 3, 1997, 459-465.

<http://www.mhra.gov.uk/aboutmhra/aboutmhra.html>



# PDUFA workload & commitments

Goal	PDUFA I	PDUFA II	PDUFA III
Complete review of priority original new drug and biologic applications and efficacy supplements	90% in 6 months		
Complete review of standard original new drug and biologic applications and efficacy supplements	90% in 12 months	90% in 10 months	
Complete review of manufacturing supplements	90% in 6 months	90% in 4 months if prior approval needed, 6 months otherwise	
Complete review of resubmitted new drug and biologic applications	90% in 6 months	90% of class 1 in 2 months and 90% of class 2 in 6 months	
Complete review of resubmitted efficacy supplements	No Goal	90% in 6 months	90% of class 1 in 2 months and 90% of class 2 in 6 months *
Discipline review letters for pre-submitted "Reviewable Units" of new drug and biologic applications	No Goal		90% in 6 months *
Report of substantive deficiencies (or lack thereof)	No Goal		90% within 14 days of filing date *
Respond to industry requests for meetings	No Goal	90% within 14 days	
Meet with industry within set times	No Goal	90% within 30, 60, or 75 days, depending on type of meeting	
Provide industry with meeting minutes	No Goal	90% within 30 days	
Communicate results of review of complete industry responses to FDA clinical holds	No Goal	90% within 30 days	
Resolve major disputes appealed by industry	No Goal	90% within 30 days	
Complete review of special protocols	No Goal	90% within 45 days	
Electronic application receipt and review	No Goal	In place by the end of FY 2002	Enhanced by the end of FY 2007



# PDUFA III electronic applications and submissions - goals

- A The Agency will centralize the accountability and funding for all PDUFA Information Technology initiatives/activities for CBER, CDER, ORA and OC under the leadership of the FDA CIO. The July 2001 HHS IT 5-year plan states that infrastructure consolidation across the department should be achieved, including standardization. The Agency CIO will be responsible for ensuring that all PDUFA III IT infrastructure and IT investments support the Agency's common IT goals, fit into a common computing environment, and follow good IT management practices.
- B The Agency CIO will chair quarterly briefings on PDUFA IT issues to periodically review and evaluate the progress of IT initiatives against project milestones, discuss alternatives when projects are not progressing, and review proposals for new initiatives. On an annual basis, an assessment will be conducted of progress against PDUFA III IT goals and, established program milestones, including appropriate changes to plans. A documented summary of the assessment will be drafted and forwarded to the Commissioner. A version of the study report redacted to remove confidential commercial or security information, or other information exempt from disclosure, will be made available to the public. The project milestones, assessment and changes will be part of the annual PDUFA III report.
- C FDA will implement a common solution in CBER, CDER, ORA and OC for the secure exchange of content including secure e-mail, electronic signatures, and secure submission of, and access to application components.
- D FDA will deliver a single point of entry for the receipt and processing of all electronic submissions in a highly secure environment. This will support CBER, CDER, OC and ORA. The system should automate the current electronic submission processes such as checking the content of electronic submissions for completeness and electronically acknowledging submissions.
- E FDA will provide a specification format for the electronic submission of the Common Technical Document (e-CTD), and provide an electronic review system for this new format that will be used by CBER, CDER and ORA reviewers. Implementation should include training to ensure successful deployment. This project will serve as the foundation for automation of other types of electronic submissions. The review software will be made available to the public.
- F Within the first 12 months, FDA will conduct an objective analysis and develop a plan for consolidation of PDUFA III IT infrastructure and desktop management services activities that will access and prioritize the consolidation possibilities among CBER, CDER, ORA and OC to achieve technical efficiencies, target potential savings and realize cost efficiencies. Based upon the results of this analysis, to the extent appropriate, establish common IT infrastructure and architecture components according to specific milestones and dates. A documented summary of analysis will be forwarded to the Commissioner. A version of the study report redacted to remove confidential commercial or security information, or other information exempt from disclosure, will be made available to the public.
- G FDA will implement Capability Maturity Model (CMM) in CBER, CDER, ORA and OC for PDUFA IT infrastructure and investments, and include other industry best practices to ensure that PDUFA III IT products and projects are of high quality and produced with optimal efficiency and cost effectiveness. This includes the development of project plans and schedules, goals, estimates of required resources, issues and risks/mitigation plans for each PDUFA III IT initiative.
- H Where common business needs exist, CBER, CDER, ORA and OC will use the same software applications, such as eCTD software, and COTS solutions.
- I Within six months of authorization, a PDUFA III IT 5-year plan will be developed. Progress will be measured against the milestones described in the plan.



# PDUFA 3 fees put program on a more sound financial footing

- Increased fee revenues with total revenue targets for each year in statute
  - \$ 222.9 M      FY 03
  - \$ 231.0 M      FY 04
  - \$ 252.0 M      FY 05
  - \$ 259.3 M      FY 06 & FY 07
- Revenue targets increased for inflation from 2003
- Revenue targets may also be increased by workload adjuster based on weighted volume of all review work
  - ♦ NDAs and BLAs)
  - ♦ Commercial INDs
  - ♦ Efficacy Supplements
  - ♦ Manufacturing Supplements



# Why PDUFA continues to be important to the public health

Before 1992, timeliness of FDA drug review was a big concern

## PDUFA

- User fees added resources for more review staff to eliminate the backlog of overdue applications and improve review timeliness
- FDA agreed to meet specific performance goals

## Result

“Revolution in regulation of pharmaceutical products”

- More predictable, streamlined process
- Reduced review and approval times